

REMARKS

Claims 22 to 42 and 45 are currently pending, with claims 43 and 44 withdrawn by the Examiner as addressed to non-elected species. Claims 29 to 31 stand objected to on informality bases. Claims 20 to 26, 29 to 42 and 45 are rejected under 35 U.S.C. §112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 20 to 26, 30 to 33, 38 to 42 and 45 are rejected under 35 U.S.C. §102(b) as unpatentable as anticipated by U.S. Patent No. 4,313,378 to Etchell et al. (“Etchell”). Claim 29 stands rejected as unpatentable as obvious, 35 U.S.C. §103(a), over Etchell et al. in view of U.S. Patent No. 3,146,709 to Bass et al. (“Bass”). Claim 34 is rejected as unpatentable as obvious over Etchell et al. in view of U.S. Patent No. 3,791,295 to Albright (“Albright”). Claims 35 to 37 stand rejected as unpatentable as obvious over Etchell et al. in view of U.S. Patent No. 4,191,106 to Fermi (“Fermi”). Claim 39 is rejected as unpatentable over Etchell et al. in view of U.S. Patent No. 3,108,538 to Barnes (“Barnes”).

Claims 20 to 21 and 29 to 31 are hereby amended to more particularly and distinctly claim the invention. Claims 43 and 44 are hereby canceled without prejudice.

Reconsideration of the application based on the foregoing amendments and the following remarks is respectfully requested.

Rejections under 35 U.S.C. 112, second paragraph

Claims 20 to 26, 29 to 42 and 45 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 22, the Examiner notes two allegedly inconsistent limitations of claim 22 of (1) “the at least one tensioning element being adapted to engage the at least one recess and produce a tension in a circumferential direction of the sleeve-like cover sufficient to cause the walls of the sleeve-like cover to contact each other when the cover is fitted to the cylinder” (emphasis added) and (2) “at least one force retaining element, edges of a printing form being fixable in the gap via the at least one retaining force element” (emphasis added). The

Examiner alleges that “[i]t is unclear how a printing form could be fixed in a gap of the sleeve-link cover if the gap of the sleeve-like cover is rendered non-existent by the tension produced by the tensioning elements” and rejected claim 22 as indefinite under §112 on that basis. Applicants respectfully traverse this rejection because, as clearly set forth in the specification, these conditions are not mutually exclusive. In particular, limitation (1) above includes the language “being adapted” which means that the at least one tensioning element and the sleeve-like cover are designed in such a way that the sleeve-like cover is sufficiently flexible and the tension imparted by the tensioning element is sufficiently high so that the walls of the sleeve-like cover can contact each other in response to the tension produced by the tensioning element. Thus, limitation (1) is an indication of the structural abilities of the sleeve-like cover and the force produced by the tensioning element when engaged, but does not necessarily mean that the walls are in mutual contact once the printing form is in its fixed stated on the sleeve-like cover. (See, e.g., Figs. 5, 6 and 7, and the associated description thereof in the specification). As a result, limitations (1) and (2) are not mutually exclusive and Applicants respectfully request withdrawal of the rejection of 22 and its dependent claims as indefinite under 35 U.S.C. §112, second paragraph.

The Examiner states that “[c]laims 20, 21, 41, and 42 appear to be incomplete, as they do not appear to depend upon the entirety of claim 22, from which they ultimately depend.” By this amendment, claims 20 and 21 are amended to be independent and to include portions of claim 22. Claims 41 and 42 are dependent on claim 21. Withdrawal of the rejection under 35 U.S.C. §112, second paragraph, of claims 20, 21, 41, and 42 is respectfully requested.

Rejections under 35 U.S.C. 102(b)

Claims 20 to 26, 30 to 33, 38 to 42 were rejected under 35 U.S.C. 102(b) as being anticipated by Etchell.

Etchell et al. discloses a "no-lock" printing plate assembly including a plate cylinder having a smooth plate-supporting surface interrupted by an axial groove defining leading and trailing edges, at least the leading edge having a flat undercut end face with a register pin anchored therein. (Abstract). The plate is formed of a thin sheet of resilient material having a smooth undersurface and which is bent over adjacent its ends to define leading and trailing edge

portions having respective longitudinal notches, the bend adjacent the leading edge making an acute angle and the bend adjacent the trailing edge making a wide obtuse angle. (Abstract).

Claim 22 recites “[a] printing cylinder apparatus comprising:

a cylinder including at least one tensioning element;

a sleeve-like cover for the cylinder including material and walls that define a gap running parallel to an axis of rotation of the cover and at least one recess in an inner circumferential surface of the cover, the at least one tensioning element being engageable in the at least one recess in order to produce a tangential tension of the sleeve-like cover when the cover is fitted to the cylinder, the at least one tensioning element being adapted such that the tangential tension elastically deforms the cover when the cover is fitted to the cylinder, thereby narrowing the gap; and

at least one retaining force element, edges of a printing form being fixable in the gap via the at least one retaining force element;

the cover being adapted to hold a plate-like printing form;

the at least one tensioning element being adapted to engage the at least one recess and produce a tension in a circumferential direction of the sleeve-like cover sufficient to cause the walls of the sleeve-like cover to contact each other when the cover is fitted to the cylinder.”

(emphasis added).

In view of the discussion above with respect to the rejection of claim 22 under 35 U.S.C. §112, second paragraph, Applicants respectfully maintain that Etchell does not disclose “the at least one tensioning element being adapted to engage the at least one recess and produce a tension in a circumferential direction of the sleeve-like cover sufficient to cause the walls of the sleeve-like cover to contact each other when the cover is fitted to the cylinder” requirement of claim 22. Etchell does not explicitly teach or disclose that hooks 54 (Fig. 1) are adapted to produce a tension in a circumferential direction on saddles 51, 52 when saddles are fitted on cylinder 10 that is sufficient to cause the ends of saddles 51, 52 to contact one another, and such a teaching is not inherent in Etchell. In fact, as previously described, the configuration of hooks and pockets 55 shown in Fig. 1 of Etchell is such that only a small component of the force generated by hooks 54 is directed in the circumferential direction and thus because of the steep

inclination of the surfaces of the hooks 54 and the surfaces of the pockets 55, the frictional force exerted between the surfaces of the hooks 54 and the surfaces of the pockets 55 is greater than any circumferential force exerted by the hooks 54.

Furthermore, the size of the gap G of axial groove 20 (Fig. 3) of Etchell must be substantially larger than twice the thickness of the plate, and particularly larger than five times the thickness of the plate. (Col. 3, lines 51 to 58; col. 4, lines 4 to 8). As a result, there would be no reason why hooks 55 would be able to produce the tension in the circumferential direction required by claim 22 (i.e., enough tension to cause the cause ends of saddles 51, 52 to contact one another). Thus, because Etchell does not disclose the “at least one tensioning element” of claim 22, Etchell does not anticipate claim 22 or any claim dependent thereon.

Finally, the Examiner, in responding to the Applicants’ prior amendment, states that “even though the surfaces of the cover in Etchell are included, it appears that the hooks 54 [of Etchell] impart a force normal to the inclined surface that will have at least some component in the tangential/circumferential direction” (Office Action, p. 4)(emphasis added). The Examiner also states “. . . (lever 54 appears capable of producing tension in cover 51, 52 and causing elongation of cover 51, 52, such that walls of the gap can contact each other if they are in close proximity).” (Office Action, p. 7)(emphasis added). This equivocal language and the speculative comments are not sufficient to establish that Etchell renders claim 22 unpatentable as anticipated, since anticipation requires that a reference must disclose each and every limitation of a claim.

Withdrawal of the rejection to claim 22 and its dependent claims under 35 U.S.C. 102(b) is respectfully requested.

Rejections under 35 U.S.C. 103(a)

Claim 29 was rejected as being unpatentable over Etchell in view of Bass. Etchell is described above. Bass discloses an apparatus for mounting cylindrical sleeve A on a mandrel B.

Claim 29 is dependent on claim 22. Because mandrel B of Bass does not include any “tensioning element” adapted to engage at least one recess and produce a tension in a circumferential direction of cylindrical sleeve A, Bass cannot cure the deficiency of Etchell with

respect to claim 22. Thus, no combination of these references teaches all the limitations of claim 29 and withdrawal of the rejection under 35 U.S.C. 103(a) of claim 29 is respectfully requested.

Claim 34 was rejected as being unpatentable over Etchell in view of Albright. Etchell is described above. Albright discloses a semi-cylindrical adapter shell or "saddle," around which is bent a thin arcuate metal or plastic printing plate, and bolted in pairs to the cylinders of newspaper printing presses to replace the now obsolescent stereotypes, has transversely spaced pins on its opposite ends projecting through holes in the inwardly bent ends or flaps of the printing plate. (Abstract).

Claim 34 is dependent on claim 22. Because printing press cylinder 14 of Albright does not include any "tensioning element" adapted to engage at least one recess and produce a tension in a circumferential direction of saddle 18 of Albright, Albright cannot cure the deficiency of Etchell with respect to claim 22. Thus, no combination of these references teaches all the limitations of claim 34 and withdrawal of the rejection under 35 U.S.C. 103(a) of claim 34 is respectfully requested.

Claims 35 to 37 were rejected as being unpatentable over Etchell in view of Fermi.

Etchell is described above. Fermi discloses a printing plate clamping assembly. A trailing edge 9 of a printing plate 6 is clamped by edge portions 10 of lock bar 11 of the clamping assembly 3. (Col. 7, Lines 37 to 39). To accommodate registration an alignment of a leading edge 7 of a printing plate 6, registration and retaining spring clips 25 are provided. (Col. 9, Lines 1 to 3). Each spring clip 25 also includes protruding bulge portions 28, 28', for aligning engagement with an opening or openings 29 on the leading edge 7 of the flexible printing plate 6. (Col. 9, Lines 7 to 11). When raised or bulge portion 28 is aligningly engaged in opening 29 of the flexible printing plate 6, the oppositely arranged bulge portion 28' is engaged against the smooth planar surface 30' of the respective opposite edge portion 8' of the shim member 2. (Col. 9, Lines 11 to 16).

Claims 35 to 37 depend from claim 22. Because printing press cylinder 1 of Fermi does not include any "tensioning element" adapted to engage at least one recess and produce a tension in a circumferential direction shim member 2, Fermi cannot cure the deficiency of Etchell with respect to claim 22. Thus, no combination of these references teaches all the limitations of

claims 35 to 37 and withdrawal of the rejection under 35 U.S.C. 103(a) of claims 35 to 37 is respectfully requested.

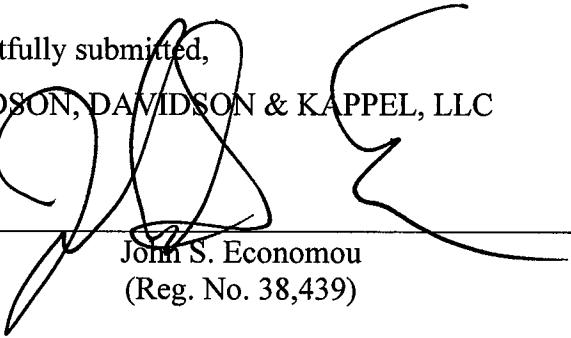
Claim 39 was rejected as being unpatentable over Etchell in view of Barnes.

Etchell is described above. Barnes discloses a flexible-printing-plate securing arrangement. Screws 33, 34 and bar assemblies 30 are used to secure two printing plates P on associated dummy plates 16a on a plate cylinder 26. (Col. 2, line 65 to Col. 3, line 14).

Claim 39 depends from claim 22. Because plate cylinder 26 of Barnes does not include any “tensioning element” adapted to engage at least one recess and produce a tension in a circumferential direction dummy plates 16a, Fermi cannot cure the deficiency of Etchell with respect to claim 22. Thus, no combination of these references teaches all the limitations of claim 39 and withdrawal of the rejection under 35 U.S.C. 103(a) of claim 39 is respectfully requested.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,
DAVIDSON, DAVIDSON & KAPPEL, LLC
By: 
John S. Economou
(Reg. No. 38,439)

Davidson, Davidson & Kappel, LLC
485 Seventh Avenue, 14th Floor
New York, New York 10018
(212) 736-1940